

# CONNECTING COGNITIVE INFORMATION PROCESSING THEORY, RESEARCH, & PRACTICE TO CAREER TRANSITIONS

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Scottsdale, AZ

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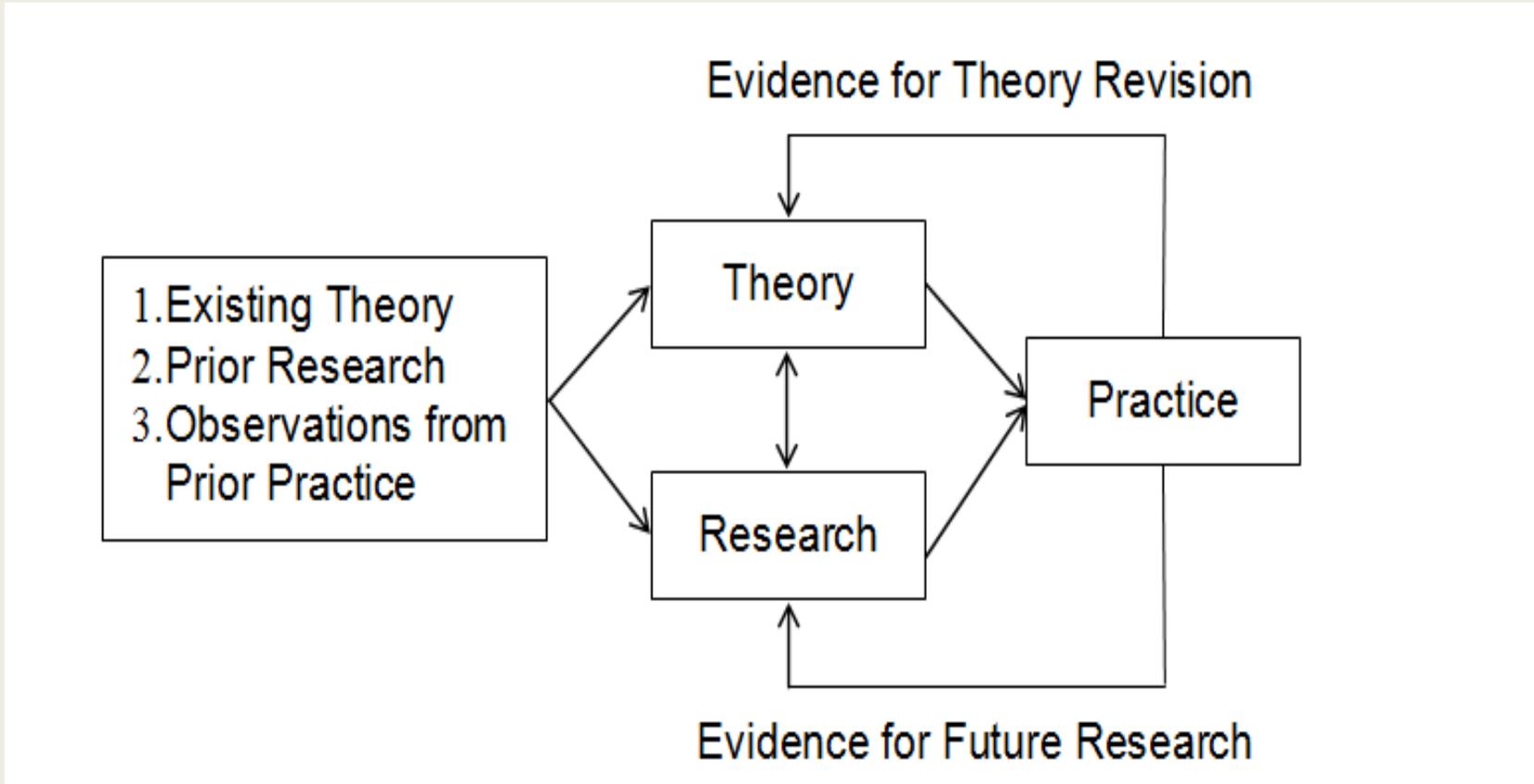
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# Integrating Theory, Research, and Practice

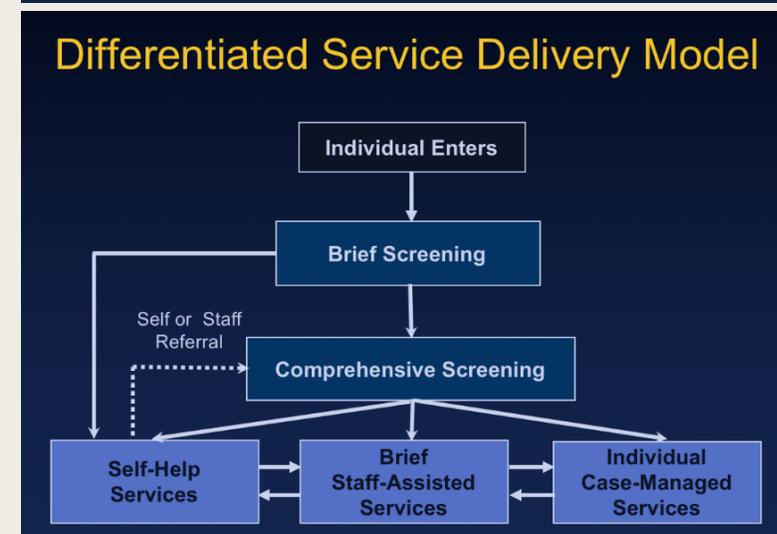
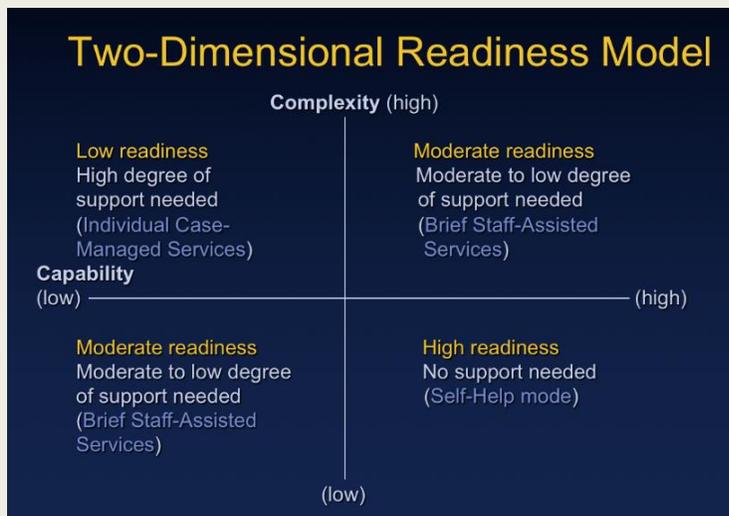
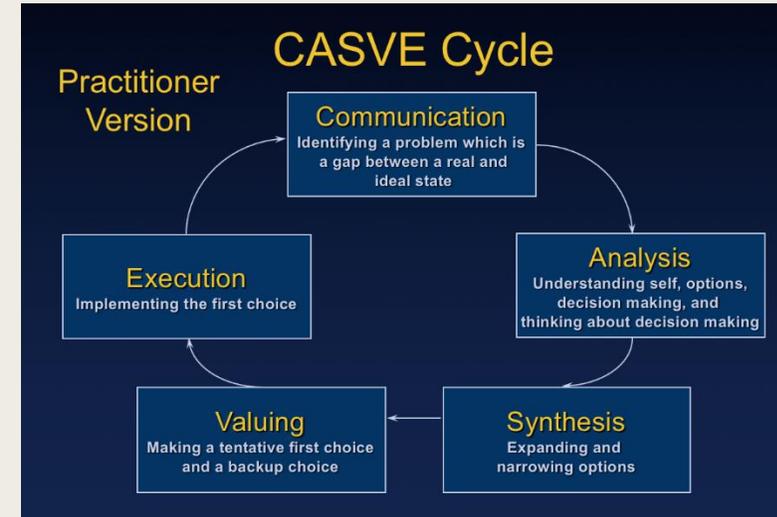
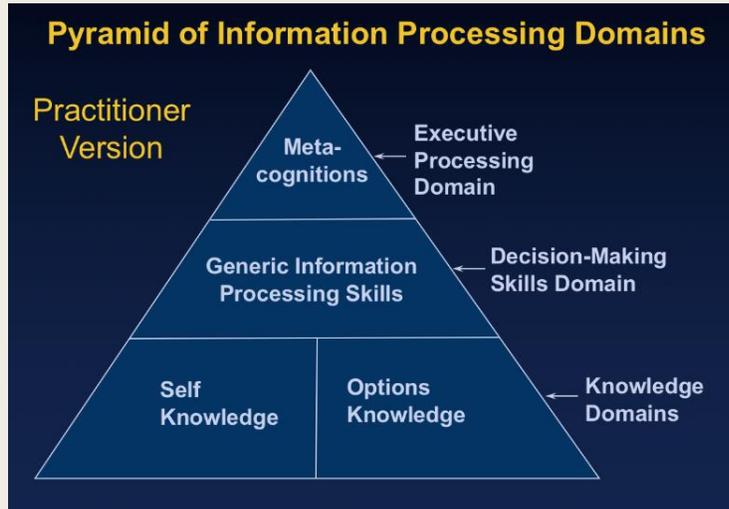


Sampson, J. P., et al. (2014). Annual review: A content analysis of career development theory, research, and practice - 2013. *The Career Development Quarterly*, 62, 290-326. doi:[10.1002/j.2161-0045.2014.00085.x](https://doi.org/10.1002/j.2161-0045.2014.00085.x)

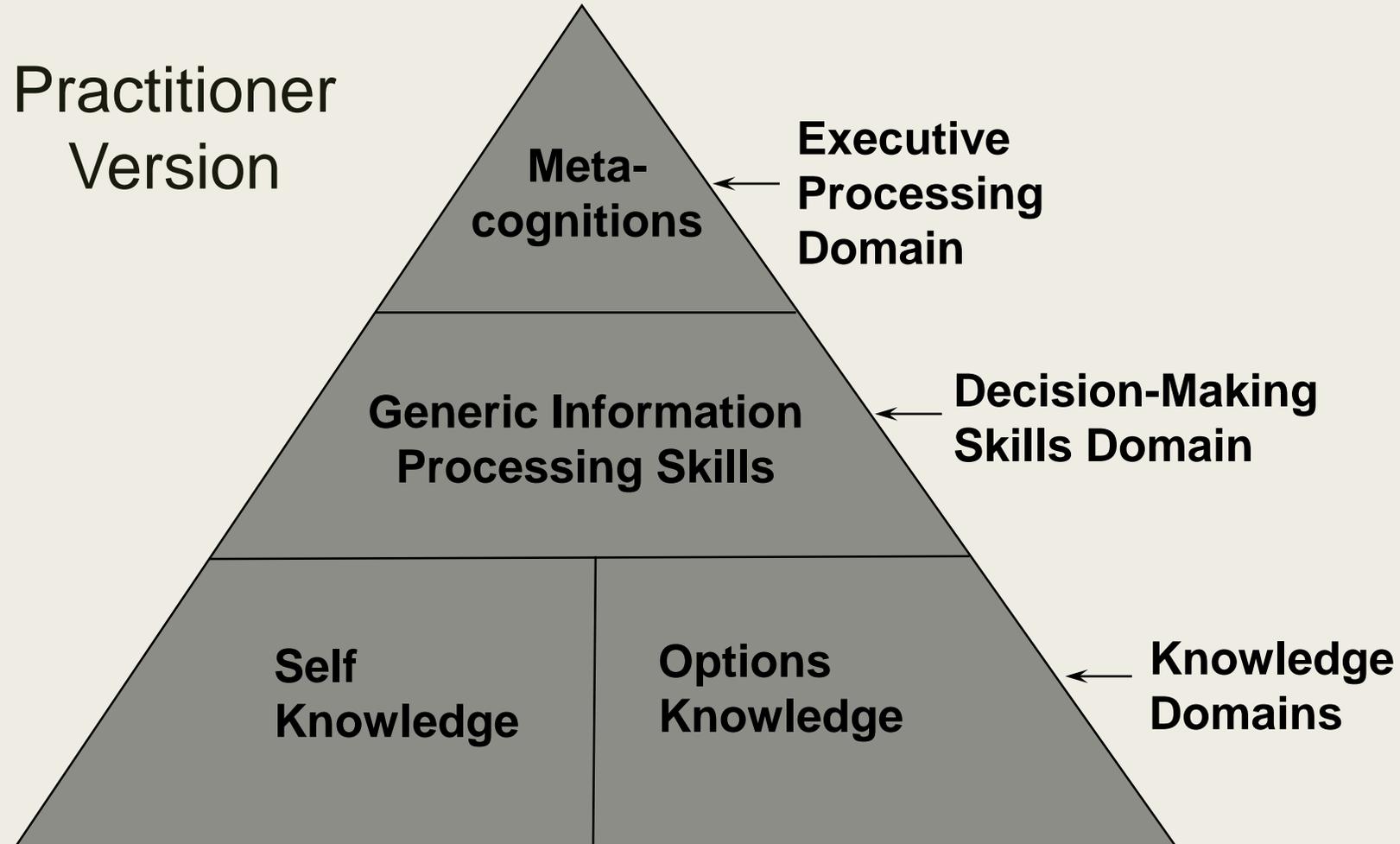
# Aims of CIP Theory

- Help individuals become more skillful career problem solvers and decision makers
- Help individuals become better prepared to make informed and careful decisions in the future
- Provide a framework for career decision making that is easily explained to clients

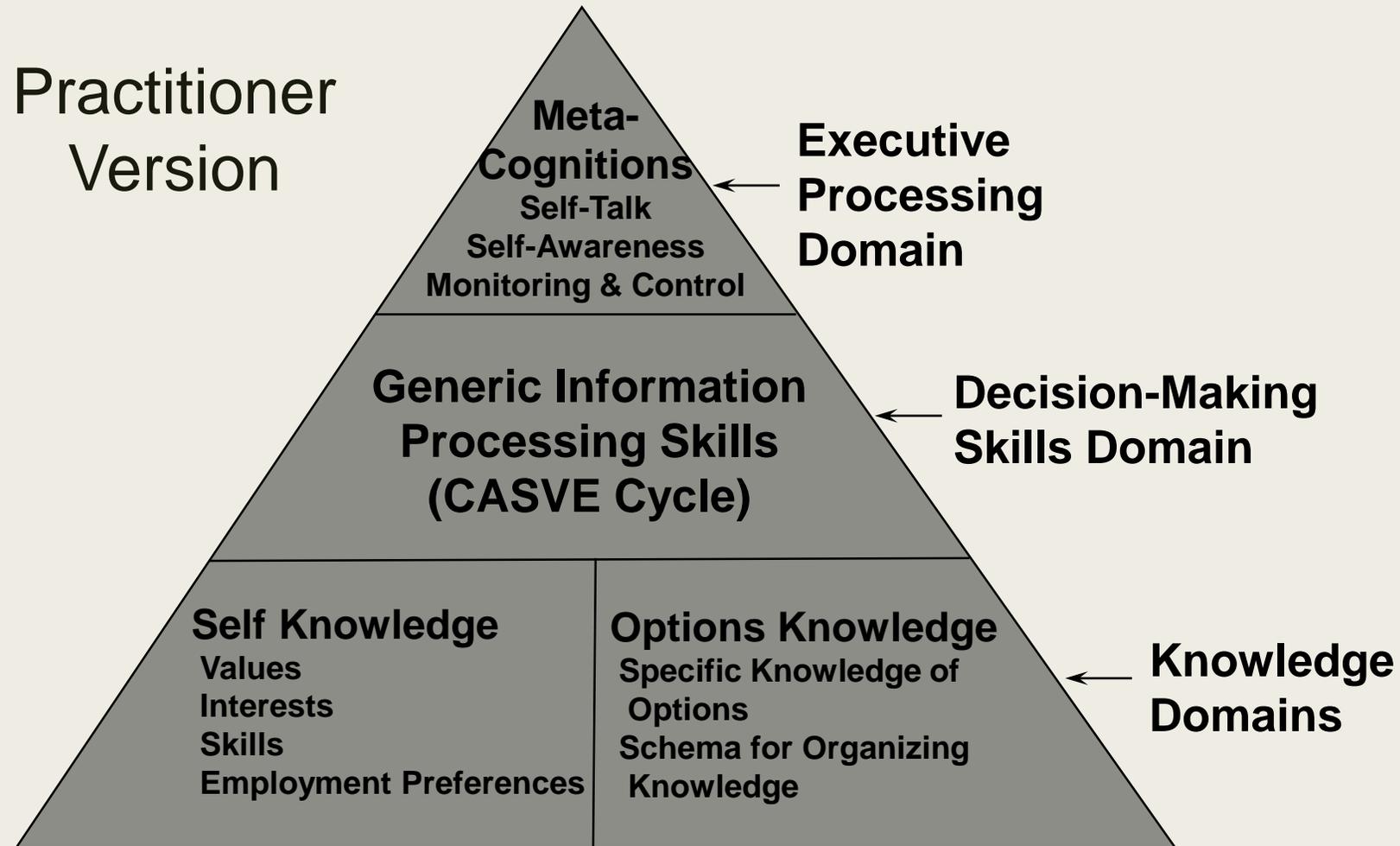
# Components of CIP Theory



# Pyramid of Information Processing Domains

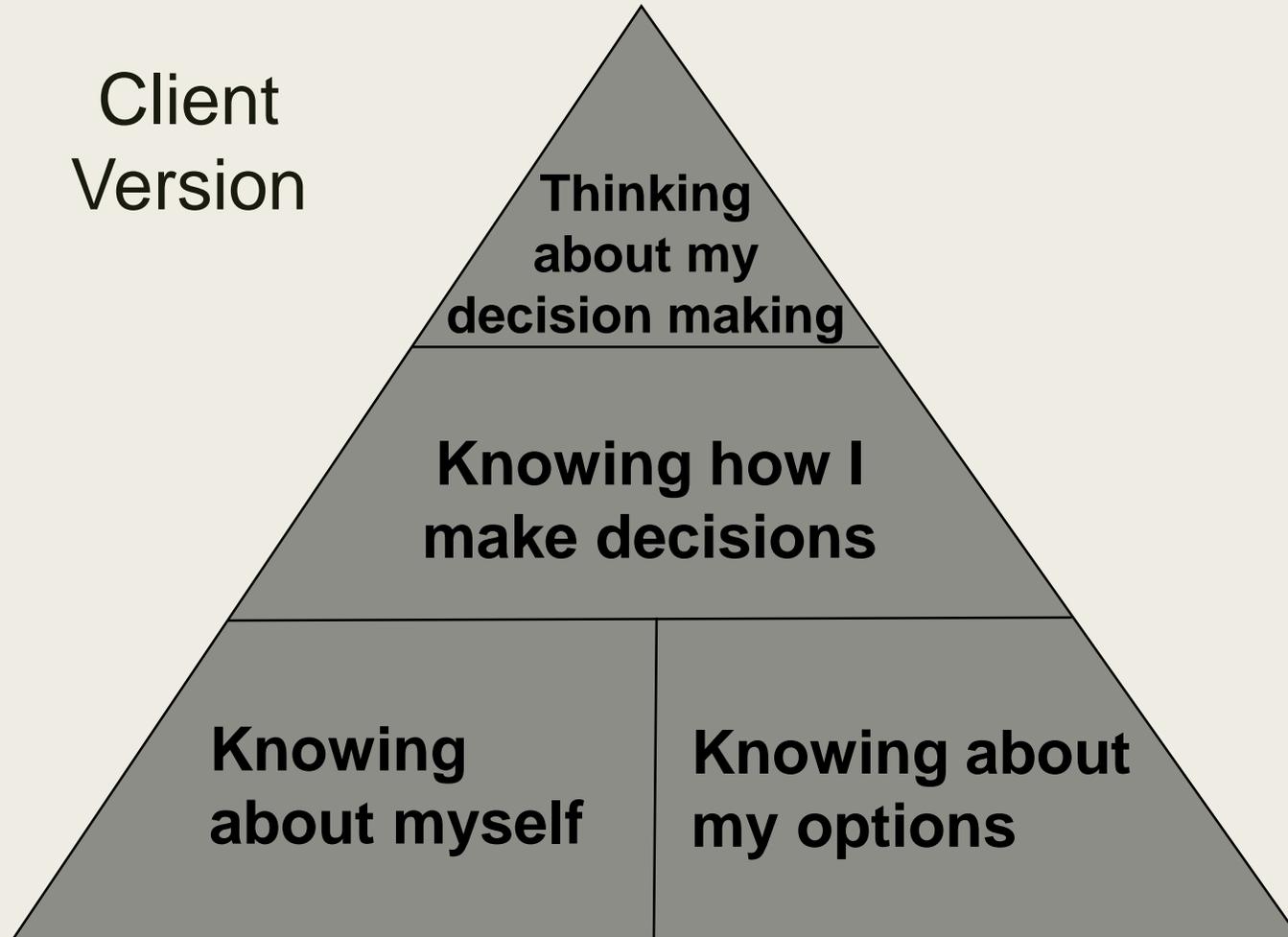


# Pyramid of Information Processing Domains



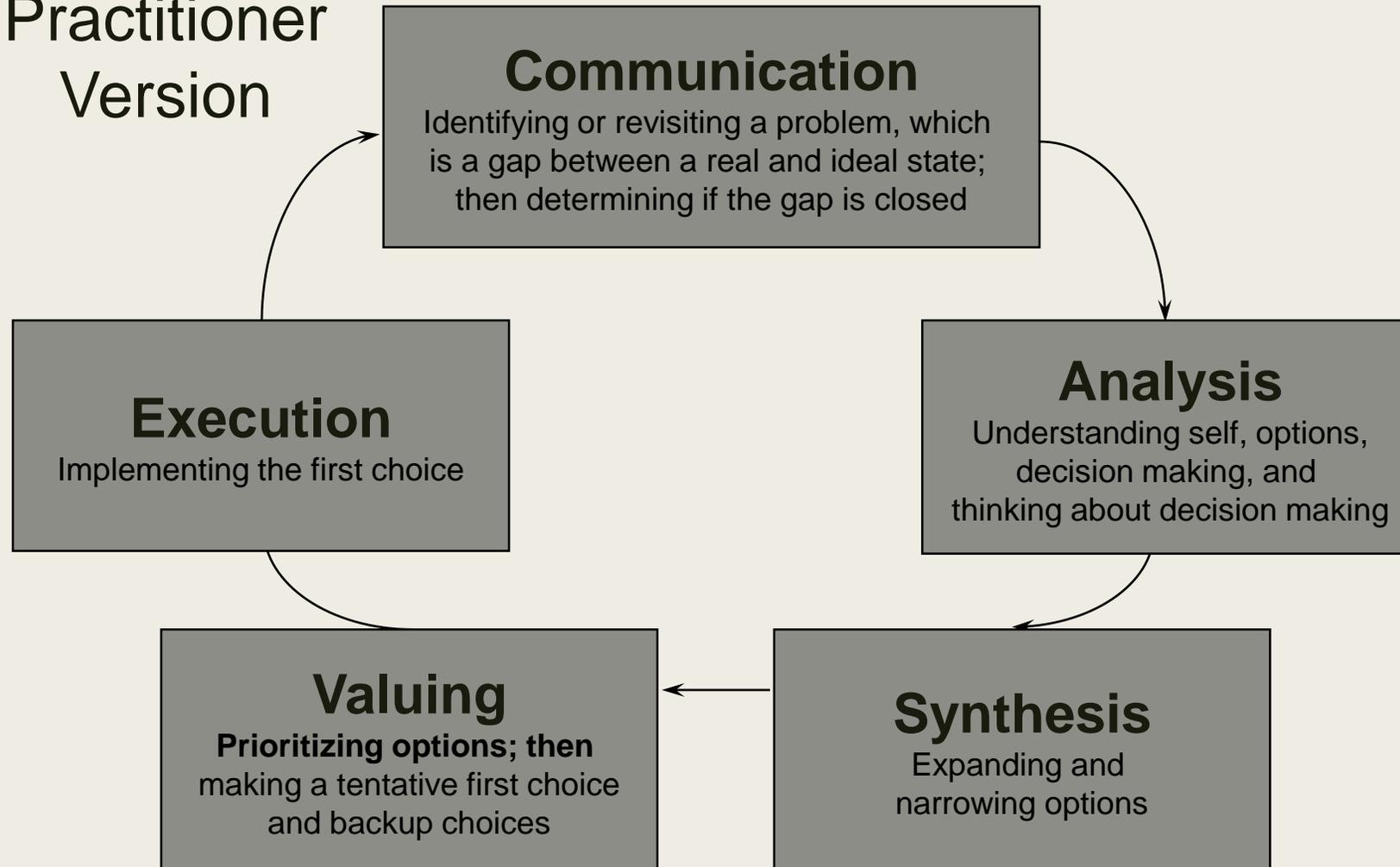
# Pyramid of Information Processing Domains

Client  
Version



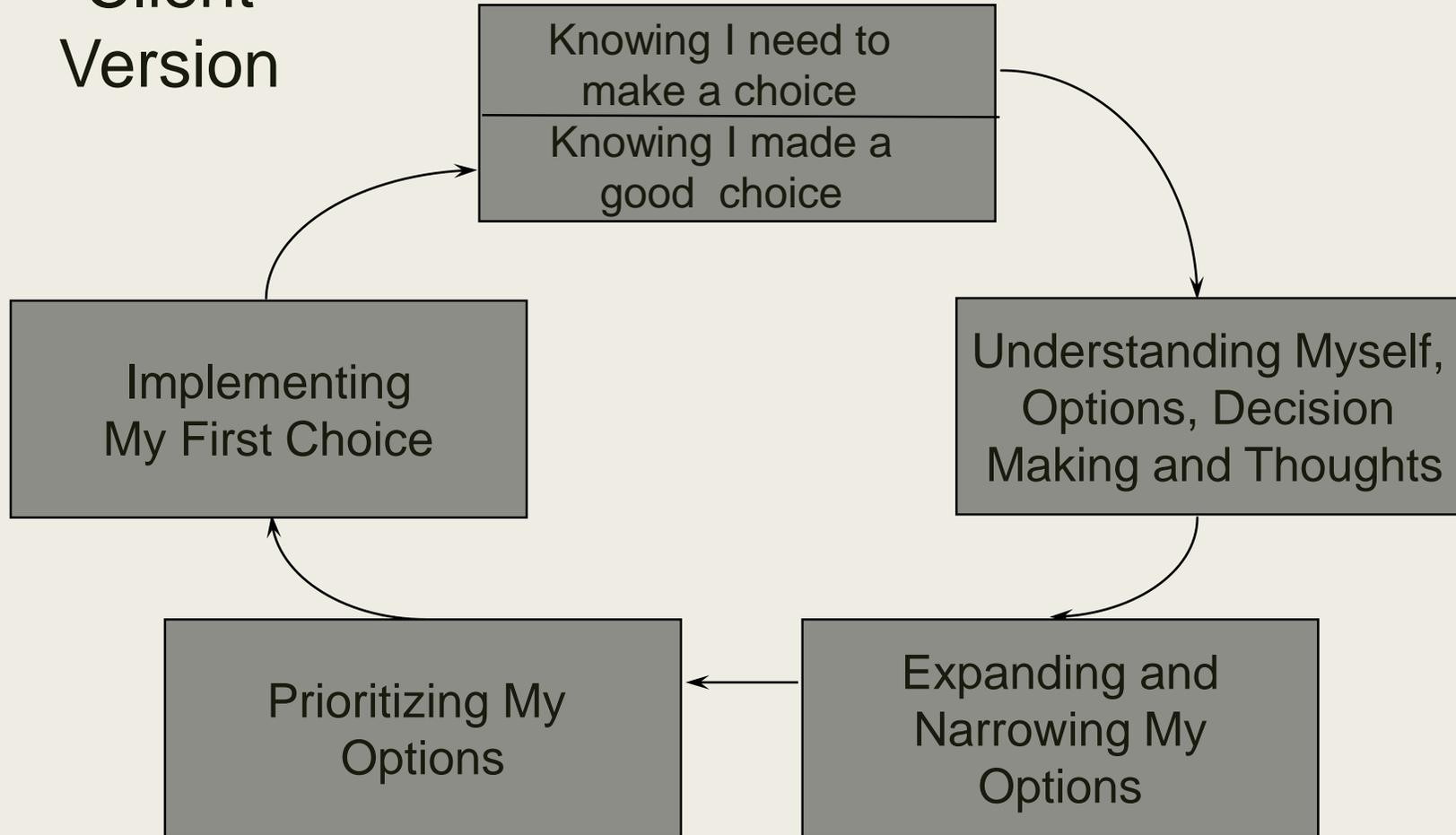
# CASVE Cycle

Practitioner  
Version



# CASVE Cycle

Client  
Version

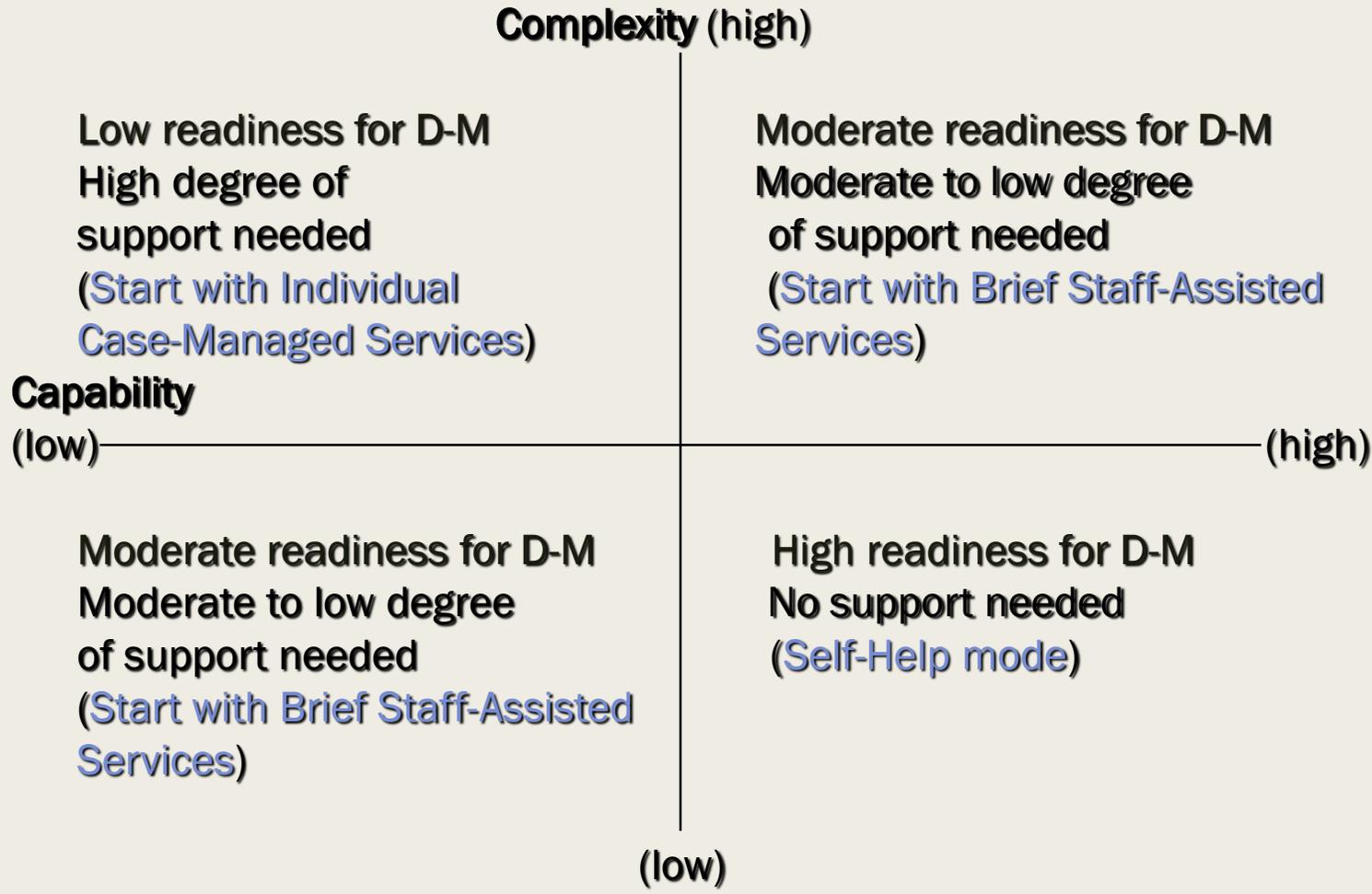


# Readiness and Career Decision Making

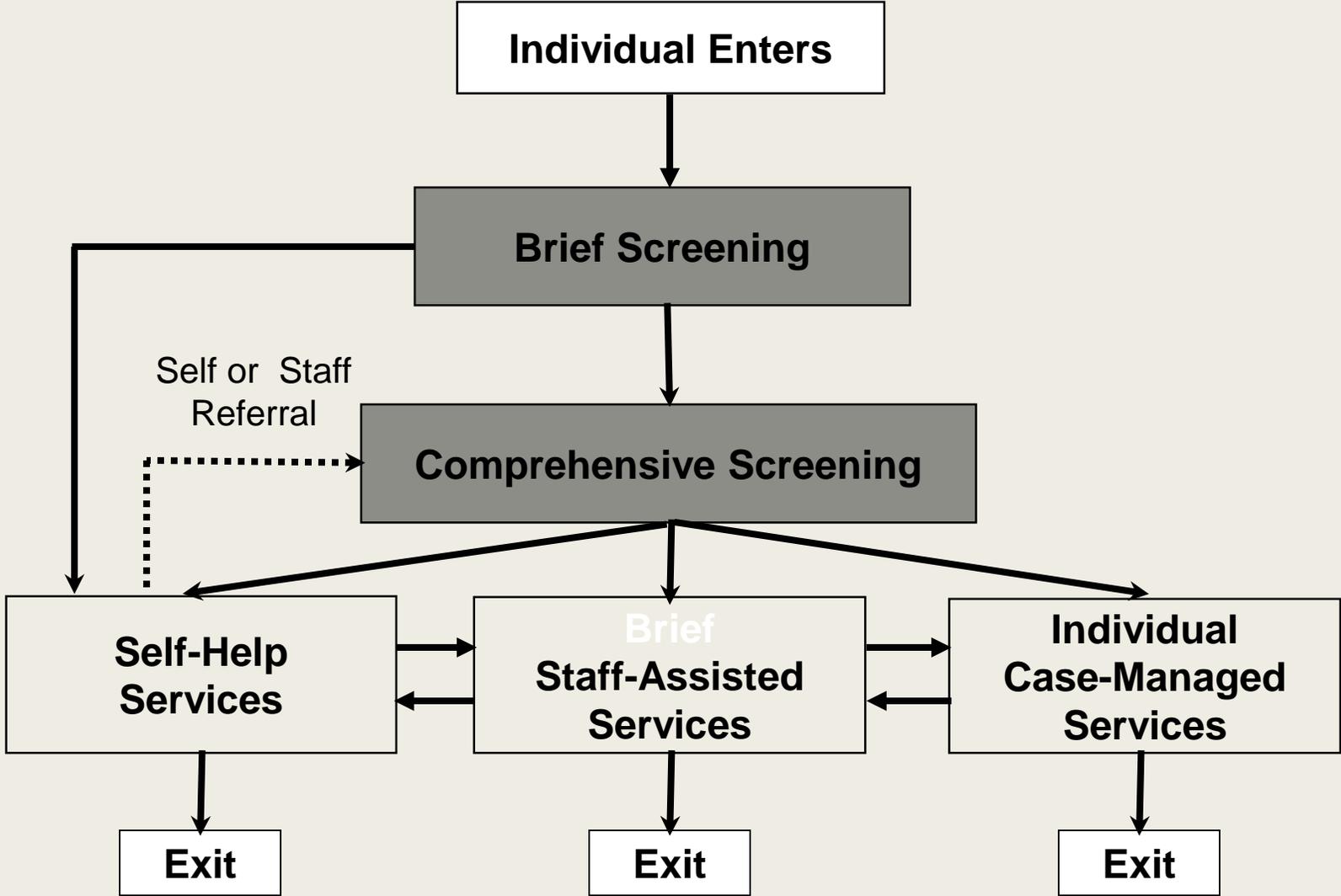
Readiness defined: capability of individuals to make informed and careful career choices taking into account the complexity of family, social, economic, and organizational factors that influence career development.

Differences in readiness for career decision making explains why some individuals have difficulty in making career decisions while other individuals do not.

# Two-Dimensional Readiness Model



# Differentiated Service Delivery Model



# CIP Assessments & Career Transitions

- ***Career Thoughts Inventory***—readiness screening tool that examines issues associated with career transitions, including decision-making confusion, commitment anxiety, and external conflict—assesses all aspects of the CIP pyramid and CASVE cycle
- ***Career State Inventory***—brief screening tool that assesses issues around clarity, satisfaction, and certainty related to clients making career transitions
- ***Decision Space Worksheet***—captures complexity of issues, both positive and negative that related to career transitions, including mental health factors

# CIP Theory Relevance to Career Transitions

- Theory's connection to information processing helps deal with the complexity of today's transitions and the "information overload"
- CIP theory is learning based and aims to teach individuals career problem-solving and decision-making skills they can use throughout their lifetime
- Theory's evidence base and its practicality has demonstrated its relevance for use in varied service delivery settings, with diverse populations making career transitions

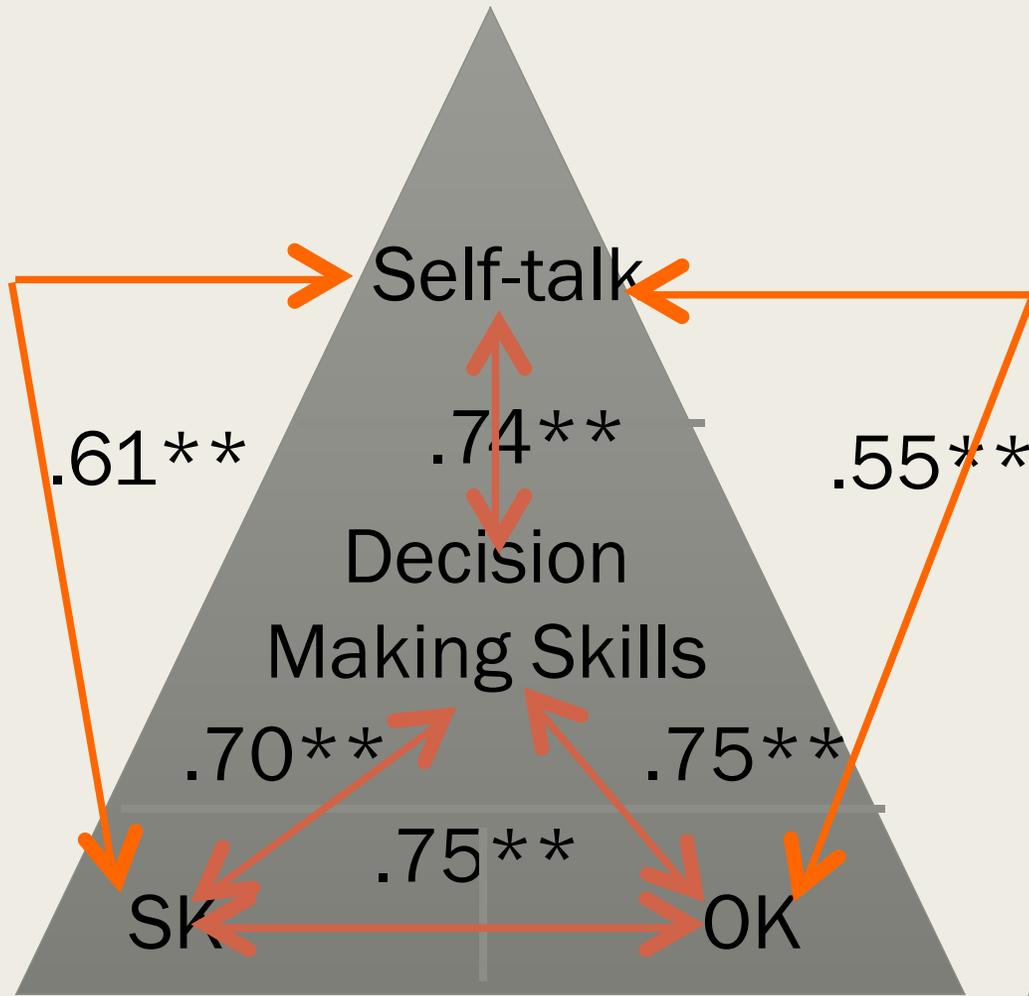
# CIP Studies of Evidence-Based Practice

	1970-1999	2000-2009	2010-2016	2017-Present	Total
Outcome, Pre/Post	2	14	9	2	27
Process/Application	3	14	15	14	46
Validity of Measures	11	51	39	7	108
Total Works	16	79	63	23	<b>181</b>

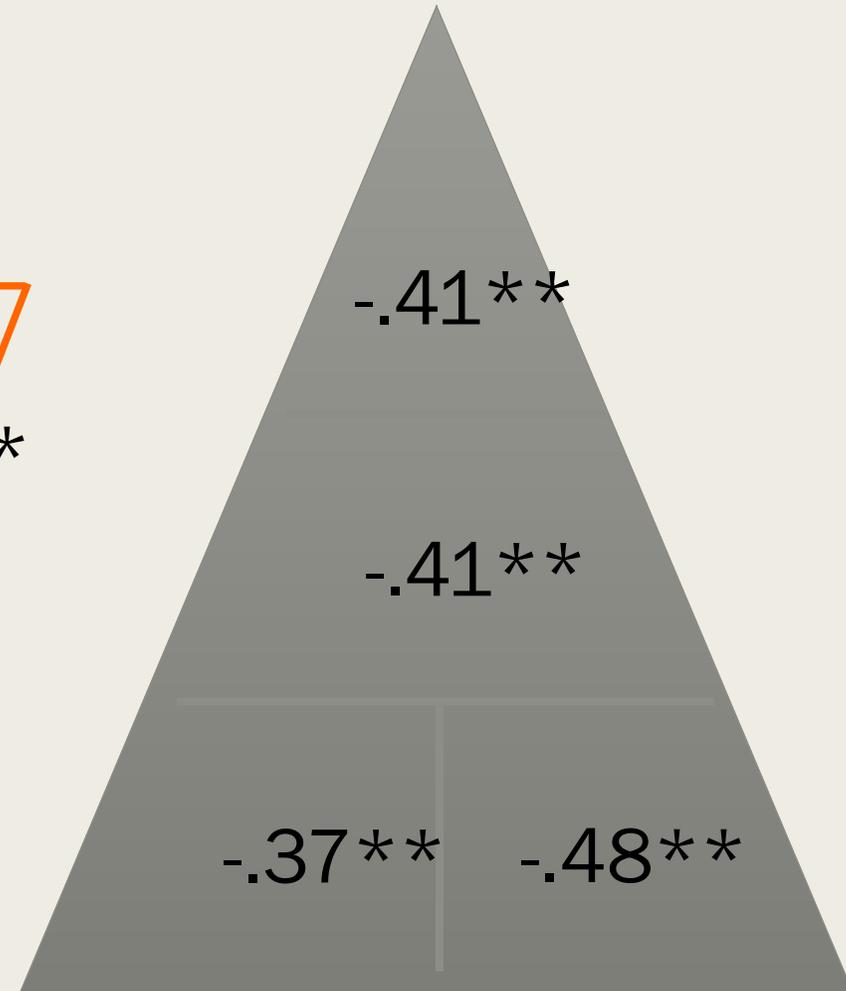
# Negative Career Thoughts & Mental Health

- Depression
  - *Walker & Peterson, 2012*
  - *Dieringer et al., 2017*
  - *Saunders et al., 2000*
- Hopelessness
  - *Dieringer et al., 2017*
- Depression, anxiety, somatic complaints, hallucinations, poor coping, work problems, negative treatment outcomes
  - *Finklea, 2017*
- Attachment anxiety/avoidance
  - *Van Ecke, 2007*
- Communication apprehension
  - *Meyer-Griffith et al., 2009*
- Trauma symptoms
  - *Strauser et al., 2006*
- External conflict/learning disability
  - *Dipeolu et al., 2002*
- Maximizing and rumination
  - *Paivandy et al., 2008*
- Goal instability
  - *Bertoch et al., 2014*
- Neuroticism
  - *Kelly & Shin, 2009*
  - *Edralin, 2018*

# What about the pyramid?



Self-rating of skills in each domain



DCTs with self-ratings

# CIP theory-high school students in transition

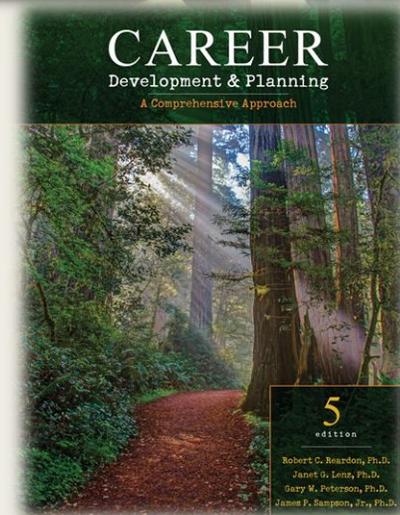
- Research & interventions in Tasmania with high school students, readiness screening to determine level of assistance needed (Hughes, C., <https://www.growcareers.com.au>)
- “People in the field of delivering career education are realising how useful, practical and concrete CIP career service delivery tools are for high school students” (Hughes, C., personal communication)
- Integrates CIP, lifespan/lifespaces, & career construction theory (*Careers work in schools: Cost-effective career interventions*)
- Incorporates Individual Learning Plan

# CIP theory-high school students in transition

- Research in Iceland—*Evaluation of career interventions: Short & long term outcomes for students finishing upper secondary school* (Bjornsdottir, M. D., 2018)
- “Students want, or at least need, very direct and practical support with their career choices” (Bjornsdottir, M. D., 2018)
- CIP-based intervention focused on written exercises, using CIP constructs, recording thoughts & feelings about career choices, using ILPs to set goals, and planning on how to achieve them
- One week after the brief intervention, students receiving CIP-theory based intervention reported high career decision self-efficacy and global life satisfaction
- “Results indicated that Icelandic students benefitted from a more organized (e.g., structured) career choice intervention” (Bjornsdottir, M. D., 2018)

# CIP theory-based career planning class

- 3 credit, 16 week undergraduate career development class, open to all students
- Uses CIP theory-based text, *Career development & planning: A comprehensive approach*
- Research indicates that course positively impacts students in transition—decision state, negative career thoughts
- Course assignment—Strategic Academic Career Plan, based on CIP theory's CASVE cycle, focused on next steps



# CIP theory—Offenders transitioning into the world of work

- Importance of effective career interventions for transitioning offenders—to enhance career and job success
- CIP theory-based program: *PIRATES--Preparing inmates for Re-Entry through Assistance, Training & Employment Skills* (Musgrove, et al., 2012)
- Adult male participants (16) were in a re-entry program; they were scheduled to be released from prison in 90 days
- Program focused on improving dysfunctional career thoughts—results showed statistically significant decrease in participants' negative career thinking

# CIP theory—Offenders transitioning into the world of work

- Research on using the CTI with incarcerated males (Meyer & Shippen, 2016); provided an indication of CTI's reliability & validity with inmates
- 86 participants incarcerated in medium security prison facility in the southeast US
- Aim was to “understand the career thoughts of inmates to facilitate...development of skills...essential to career success”
- “Discussing dysfunctional career thinking, including issues related to anxiety, decision making and barriers may be a powerful deterrent to recidivism” (Meyer & Shippen, 2016, p. 355)

# Transition Efforts through CIP Theory, Practice, and Research Integration

- Transitioning Students
  - *CIP Career Counseling Group for College Students: Protocol and Outcomes*
  - *CIP-based college courses*
  - *Transitioning High School Students to College through a College Experience Program*
- Transitioning Unemployed Adults back to paid work
  - *Bullock-Yowell, E., Leavell, K., McConnell, A., Rushing, A., Andrews, L., Campbell, M., & Osborne, L. (2014). Career decision-making intervention with unemployed adults: When good interventions are not effective. Journal of Employment Counseling, 51, 16-30.*
- Transition assessment tool under development, The CASVE-CQ
- Transitioning counseling & psychology graduate students into practitioners
  - *Consumable theory for training practitioners*
  - *Training graduate students and their initial CIP-based counseling experiences*

# Transitioning Students

## CIP Career Counseling Group for College Students

- Individual Intake session with assessments
  - Session 1-Intros, Goal Establishment, Metacognitions
  - Session 2-Self-Knowledge
  - Session 3-Self & Options Knowledge and Decision Making Introduced
  - Session 4-Decision Making/CASVE Cycle Continued
  - Session 5-Next Steps, Termination, and Post-testing
- 
- Leuty, M., Bullock-Yowell, E., Womack, A., Schmidtman, E., Paulson, D., Andrews, L. M., & Osborne, L. (2015). The integration of science and practice in one training program: Outcomes of a manualized career counseling group. *Counselling Psychology Quarterly*. DOI: 10.1080/09515070.2015.1053432
    - Decrease in negative career thoughts
    - Increase in career decision-making self efficacy
    - No change in depression, anxiety, or stress

# The CASVE-CQ: A CIP-based Measure of Decision Making

- *Utilizes CIP CASVE Cycle Decision Making model to assess client decision-making progress*
- *Data on college students and Mturk participants (working adults online sample)*
- *Mturk EFA data suggests subscales adhere to theory-based CASVE phases; CFA data under analysis*
  - *Communication 1-8 items all loadings above .43;  $\alpha=.8$*
  - *Analysis-5 items all loading above .45;  $\alpha=.8$*
  - *Synthesis-8 items all loading above .39;  $\alpha=.8$*
  - *Valuing-8 items all loading above .36;  $\alpha=.8$*
  - *Execution-8 items all loading above .45;  $\alpha=.8$*
  - *Communication 2-5 items all loading above .49;  $\alpha=.78$*
  - *Total-42 items;  $\alpha=.8$*
- *Correlations with validating assessment are supportive of the theoretical basis of the CASVE-CQ*
- *Full Round Table on the latest findings was this morning with presentation notes to be posted at, <https://emilybullockyowellphd.weebly.com/>*

# Using CIP to Transition from Graduate Student to Practitioners

- Consumable theory for training practitioners
- Training graduate students and their initial CIP-based counseling experiences
- Initially train my graduate students through a course based 2-3 session experience with ~5 clients that includes assessment
- More advanced student run our manualized CIP-based career counseling groups
- Students working with us to transition this service more fully in the community
  - *Community Mental Health Center*
  - *LGBTQ+ Community Center*

# CIP Theory Application with Military Service Members and Veterans

- Provides a structure to address complicated concerns of student veterans (Hayden, Ledwith, Dong, & Buzzetta, 2014)
- Can assist military service members and veterans with disabilities in navigating career development considerations given combat-related injuries (Hayden, Green, & Dorsett, 2013)
- Preliminary outcome data indicates potential to integrate with Holland's theory in a group counseling format to benefit veterans experiencing homelessness (Hayden, in review)
- Specific aspects of career development for this population.
  - Addressing unemployment (Bullock, Braud, Andrews & Phillips, 2009)
  - Job search strategies for military service members (Buzzetta, Hayden & Ledwith, 2017)
  - Transitioning to civilian world of work (Clemons & Milsom, 2008)

# Research into CIP Theory's Differentiated Service Delivery Model

- What is the effect of a brief-assisted career counseling model on general outcomes?
- What are the attitudes of drop-in clients regarding the effectiveness of a brief-assisted career counseling model?
- What is the relationship between process characteristics and changes in outcome variables?
  - *pre and post test scores on knowledge, confidence, anxiety; post test feelings, thoughts about counseling interactions, etc. )*

# Research into CIP Theory's Differentiated Service Delivery Model

- Pre/Post Surveys
- Session Rating Scale
  - Duncan, Miller, Sparks, Calud, Reynolds, Brown, & Johnson, 2003
  - Cronbach's alpha: .88; this study .94
- ANOVA and Correlations
- 128 Drop-In Clients

# Brief-Assisted Model (128 drop in clients)

*Comparisons between Pre-intervention and Post-intervention Scores on Brief Staff-Assisted Outcomes (n = 138)*

Dimension	Pre-intervention		Post-intervention		F	d	Percent of Change Scores <sup>c</sup>		
	M	SD	M	SD			Positive	Neutral	Negative
1. Knowledge of next steps	3.40 <sup>a</sup>	1.04	3.90	.81	36.22**	.51	38.4	55.8	5.8
2. Confidence in next steps	3.77 <sup>a</sup>	.89	4.01	.71	13.29**	.31	26.5	64.0	9.6
3. Anxiety about concern	3.46 <sup>b</sup>	1.10	3.20	1.03	9.20*	-.26	10.8	57.2	31.9

\* $p < .01$

\*\* $p < .001$

a. 5-point scale, 5 = Strongly agree, 1 = Strongly disagree

b. 4-point scale, 1 = not at all anxious, 2 = A little anxious, 3 = Moderately anxious, 4 = Very anxious

c. Change score = (post-intervention minus pre-intervention)

Significant changes on each variable

Medium ES for knowledge & confidence

Small ES for anxiety

26.3% no additional help needed

67.2% brief assisted desired

6.6% individual counseling desired

# Brief-Assisted Model (128 drop in clients)

Process Indicators for Brief Staff-Assisted Interventions

Variable	M	SD	Range	Notes
1. Session Rating Scale Total <sup>a</sup>	37.74	5.10	40 - 6	84.8% 36 or above
2. Made progress on career concern <sup>b</sup>	4.12	.77	5 - 1	84.0% agree or strongly agree
3. Felt positive about accomplishment <sup>b</sup>	4.39	.69	5 - 2	92.8% agree or strongly agree
4. Career advisor assisted me with strategies <sup>b</sup>	4.42	.64	5 - 2	93.4% agree or strongly agree
5. Need for additional service <sup>c</sup>	1.80	.54	1 - 3	26.3% none 67.2% brief walk-in 6.6% individual counseling

a. 4 items, 10-point scale, 10 = high, 1 = low

b. 5-point scale, 5 = strongly agree, 1 = strongly disagree

c. 3-point scale, 1 = none, 2 = brief walk-in, 3 = individual counseling

# Social Justice Issues in Integrating Theory, Research, and Practice

- As the typical number of career choices made by individuals increases, demand for career services increases.
- The availability of career services, in terms of the number of individuals that can be served, is influenced by the staffing requirements to implement specific career theories.
- As demand increases, career services need to make responsible use of the staff time that is available.



# Social Justice Issues in Integrating Theory, Research, and Practice

- Adequate access to career services for persons who need assistance is a social justice issue.
- Overreliance on appointment-based individual counseling interventions can create unintentional social injustice.
- “Who are we responsible for as career practitioners? Are we responsible only for the clients who come through our door, or are we responsible for the citizens in our society who need help with career choices?”

# Social Justice Issues in Integrating Theory, Research, and Practice

Goal of CIP theory:

- *maximize the number of people experiencing career transitions that can be cost-effectively served by providing a level of service that fits their assessed needs.*

# Summary & Questions

**References and Websites**—*a copy of this presentation will be found on our associated websites*

- <https://career.fsu.edu/tech-center/resources/presentations>

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